

Tonya White  
Randi Ettner

## Adaptation and adjustment in children of transsexual parents

Accepted: 3 October 2006  
Published online: 28 November 2006

T. White, MD (✉)  
Division of Child and Adolescent  
Psychiatry  
Dept. of Psychiatry  
University of Minnesota School of  
Medicine  
2450 Riverside Ave F256/2B  
Minneapolis (MN) 55454, USA  
Tel.: +1-612/273-9762  
Fax: +1-612/273-9779  
E-Mail: twhite@umn.edu

T. White, MD  
Center for Neurobehavioral Development  
University of Minnesota  
Minneapolis (MN) 55455, USA

R. Ettner, PhD  
New Health Foundation  
1214 Lake St.  
Evanston (IL) 60201, USA

■ **Abstract** It is a relatively uncommon event that children find themselves in a situation with a parent who undergoes a transition from one sex to another. Unlike situations of divorce or a parent with a medical or major psychiatric disorder, it is unlikely that the children will know of other children who encounter similar situations. There is very little literature that describes the adjustment of these children and the nature of their relationships with their parents and peers. Such information would be beneficial for clinicians assisting children and families in this situation. To better delineate the adjustment of these children, we interviewed 27 parents of 55 children. The interview took place on average 6 years after the gender transition. The measures obtained included the

parent and child relationships at present and also at the time of the transition. We also inquired about academic function, peer relationships and social stigma. The results found that children who were younger at the time of the parent's transition tended to have better relationships and less adjustment difficulties. In addition, parental conflict that continues after the transition period tends to reflect greater family conflict between the transitioned parent and their child.

■ **Key words** children – adolescents – transsexual – gender identity disorder – adjustment – resilience

### Introduction

The process of physical and emotional development of children through adolescence and adulthood is not always a smooth process. Events such as divorce, encountered in upwards of 50% of families [12, 23], or a parent with a medical or psychiatric disorder add additional challenges to a child's typical development. Numerous studies have evaluated the adjustment of children to divorce [7, 8, 12] or parental illnesses [2, 6, 14, 24] and specific risk and resiliency factors have been identified. There is some evidence to support

that these risk and protective factors generalize, applying also to the adjustment of children with a parent who transitions from one sex to the other [25].

There is a qualitative difference for children who experience a parent gender transition compared to parents who divorce or have physical or mental illnesses. Not only is such a transition relatively uncommon, but it may also be associated with considerable social stigma. The life events experienced by these children during the period of time that a parent undergoes such changes may include separation or divorce of their parents, considerable familial conflict,

and factors associated with such a dramatic change in one of their parents [21]. This is a considerable series of life events in which the majority of children do not discuss with their peers.

There is very little research on the adjustment of children whose parents undergo a gender transition. Green [11] reported that 37 children raised by parents who were either homosexual or transsexual (TS) did not differ appreciably from those raised in more traditional settings. The majority of those raised with a TS parent had witnessed the transition. The focus of Green's work was directed toward psychosexual development and identity formation, in contrast to overall adaptation of the children. He found no difficulties in psychosexual or identity development in these children.

We recently published a study in which we surveyed experienced therapists who work with transgender patients and their families [25]. We obtained information regarding the therapist's experience with children's reactions to a parent who made a gender transition. The therapists identified a number of factors that served as risk and protective factors for these children. In addition, we found that there was an overall consensus that younger children adjusted much better to the transition compared to adolescents and young adults. Adolescents had the greatest difficulties adjusting, as did young adults, this was especially true when considerable family conflict was present.

The current study is an extension of the question of the adaptation of children who are found in a situation of a parent who undergoes a transition between genders. We were interested in further testing the hypothesis that children who are younger at the time of the transition tend to have less difficulties with adjustment. Thus, the study is developmental in nature, assessing and comparing the children within different developmental stages. We also studied the role of parent-parent and parent-child relationships on the adjustment of the children. Finally, we were interested in studying the role of social stigma encountered by the child.

## Methods

### ■ Subjects

Information was obtained from 27 parents with a history of TS who have undergone a transition to the opposite biological sex. In most cases, the information was acquired through a semi-structured interview with the participant, however in 2 cases, the participants completed a questionnaire with the same information. From these 27 parents, information was

obtained on 55 offspring between the ages of 8 and 35 years. The interview systematically covered a number of questions relating to the nature of the relationships around the time of the transition. In addition, questions addressing the current relationship with each parent, the child's fear of being stigmatized by the transition, social losses experienced by the child, academic performance, and whether the child was willing to discuss the transition with their peers. Finally, measures of temperament were collected for each family member. The participant was given the opportunity to provide open-ended comments as to what they have found either helpful or harmful in their child's adjustment.

### ■ Statistical analyses

Chi-square analyses were performed to assess the categorical data. Either two-tailed *T*-tests or Pierson correlation coefficients were used to assess the relationship between clinical measures. Finally, a backward stepwise linear regression was utilized to determine which factors predicted a positive adjustment in the children of TS parents. All statistical analyses were performed using the SAS statistical software package (Version 9.1, SAS Institute, Inc. Cary, NC, USA).

## Results

### ■ Characteristics of the parents

The age of the 27 parents at the time of their participation ranged from 41 to 63 years (mean 50.0, SD 5.8 years). All but two of these parents underwent a transition from male-to-female. The age at the time of transition ranged from 33 to 61 years (mean 43.6, SD 7.0). One participant was African American and the remainder (97%) were Caucasian. The group tended to be highly educated, with 57% having a Masters or doctoral degree, 25% being college graduates, and 18% with a high school or technical degree.

During the time of the transition, 7 families remained together, 12 divorced at or around the time of transition, and 8 were already divorced at the time of the transition. At the time of the study, 6 of the families had remained together, whereas 21 were divorced or separated. The average age at the time of divorce was 40.7 (SD 7.6) years; with a range spanning from 20 to 50 years of age.

Of the 27 parents, 23 have undergone sex reassignment surgery. The four who have not had surgery have both hormonally and socially transitioned, and were planning to have sex reassignment surgery. The

average age at the time of surgery was 44.9 years (SD 6.5). Thus, the information collected during this study occurred on average 6 years following the transition and five years post-surgery.

### ■ Characteristics of the children

There were 55 offspring from the TS parents, 24 males and 31 females. The age at interview of these children ranged from 8 to 35 (mean age 18.7, SD 6.3 years). About 40 of the children (73%) were still attending school, with a mean academic level of 10th grade (SD 4.5) and a range from 2nd grade to doctoral level studies.

There was a wide range for the child's age at the time of transition, spanning from 1 to 25 years (mean age 12.9, SD 6.7 years). For parents who separated or divorced, the average age of the children at the time of this event was 11.1 (SD 7.6) years. The majority of the children's parents separated or divorced within a year of the parent's transition.

### ■ Elements of disclosure

The average age that the TS parent disclosed their condition to their spouse was 34.1 years (SD 9.3 years). Thus, there was an average duration of 9.5 years between the time of disclosure to the spouse and the transition. A longer interval between disclosure and the transition did not improve the familial relationships at the time of the transition. However, the level of conflict between child and the transitioned parent was higher when there was a longer interval between disclosure to the spouse and the transition ( $t = 2.44$ ,  $df = 53$ ,  $p < 0.02$ ).

The mean age that the child learned of their parents plan to transition was 11.9 (SD 6.4) years. There was a mean duration of 1.1 years between disclosure to the child and the transition (range of 9 years before and 6 years following the transition). There was not a significant relationship between the period of time that the child was aware of the parent's plans and the parent-child interaction.

Over half of the children (58%) did not reveal or discuss their parent's transition with their peers. Of those who did, the average age that they discussed this with their peers was 13.9 (SD 4.4) years. There were no statistically significant differences in peer disclosure between males (39% who disclosed) and females (52% who disclosed). In total, 17% of the children were felt to suffer socially as a result of the transition. Those children who were embarrassed by the transition were the same children who suffered socially as a result of the transition ( $t = 3.31$ ,  $df = 45$ ,  $p < 0.002$ ).

### ■ Adjustment of the children

A total of 40 children (73%) did not exhibit any decline in academic performance at the time of the parent's transition. A total of 13% children (23%) experienced a mild to moderate decline in academic performance, and 2 children (4%) demonstrated a severe decline in academic performance. In the case of severe decline, one parent noted that it was difficult to tease apart the effects of the divorce from the gender transition, since this child experienced significant parental conflict between the transitioning and non-transitioning parent. There was not a significant correlation between the decline in academic performance and the parent-parent and parent-child relationships.

For children attending school, there was not a relationship between age or grade and academic decline. The children who demonstrated a decline in academic performance were also the same children who perceived greater social stigma as a result of the transition ( $t = -2.24$ ,  $df = 39$ ,  $p = 0.03$ ).

Approximately one-third of the children continued to use the pre-transition parental title in public settings (i.e., "dad" in a male-to-female transitioned woman). One-third of the children used their parent's first name in public, and the remainder either used a nickname (20%), aunt or uncle (2%), or a post-transition congruent parental title (5%). Approximately 10% had no contact at all with their child.

### ■ Psychopathology in the children

A total of 19 children (35%) were reported to have a psychiatric disorder. Of these children, the disorder started prior to the parent's transition in 12 children, during the transition in one child, and post-transition in 6 children (See Table 1). The sample tended to have a greater number of internalizing versus externalizing disorders. About 7 (13%) of the offspring had a history of depression, 3 (5%) an eating disorder, 4 (7%) ADHD, and 2 (4%) a substance abuse disorder. In addition, one child had learning disabilities, and another was mentally handicapped. None of the children in the group were reported to have Gender Identity Disorder.

### ■ Factors associated with relationship between child and transitioned parent

At the time of the transition, approximately 20% of the families experienced high or extreme levels of conflict between parents, or alternatively, no contact at all between the TS parent and child. This percent-

**Table 1** Psychiatric disorders in the children of transitioned parents

Onset of the disorder	Internalizing disorders	Externalizing disorders
Pre-transition	Depression ( <i>n</i> = 3) Obsessive compulsive D/O ( <i>n</i> = 1) Anxiety D/O ( <i>n</i> = 1) Post-traumatic stress D/O ( <i>n</i> = 1) Binge eating disorder ( <i>n</i> = 1)	ADHD ( <i>n</i> = 3) Substance abuse ( <i>n</i> = 2) Gambling addiction ( <i>n</i> = 1)
During the transition	Eating disorder ( <i>n</i> = 1)	
Post-transition	Depression ( <i>n</i> = 4) Eating disorder ( <i>n</i> = 1) Bipolar affective disorder ( <i>n</i> = 1)	ADHD ( <i>n</i> = 1)

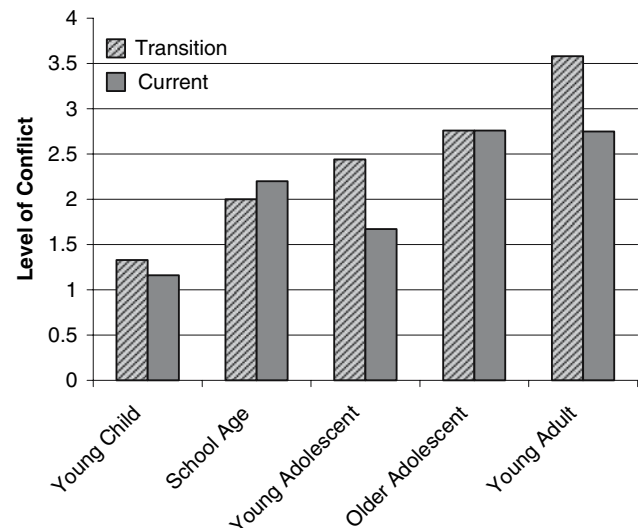
age of high conflict relationships had dropped to approximately 15% after an average post-transition interval of 6 years. This latter percentage is contrasted to 10% of the non-transitioned parent and child having high or extreme levels of conflict. Approximately 5% of the children (*n* = 3) had no contact with their TS parent during the transition, which increased to 10% (*n* = 5) after six years post-transition.

There were several factors that predicted a positive relationship between the transitioned parent and the child at the time of the interview. These included less conflict at the time of the transition ( $F = 12.07$ ,  $p = 0.001$ ) and less post-transition conflict between the transitioned parent and the non-transitioned parent ( $F = 8.99$ ,  $p < 0.005$ ). Interestingly, the level of conflict between the parents at the time of the transition was not predictive of later relationship difficulties between the children and the transitioned parent.

Children who were younger at both disclosure ( $t = 4.15$ ,  $df = 52$ ,  $p = 0.001$ ) and transition ( $t = 3.76$ ,  $df = 53$ ,  $p = 0.004$ ) had significantly less conflict with the TS parent at the time of the transition (Fig. 1). This relationship for younger age of the child at disclosure ( $t = 2.47$ ,  $df = 52$ ,  $p < 0.02$ ) and age at transition ( $t = 2.14$ ,  $df = 53$ ,  $p < 0.04$ ) also held true for the post-transition relationship between child and TS parent. At the time of the transition, but not at the time of the study, children who were more embarrassed about the transition had higher levels of conflict with the TS parent ( $t = 4.44$ ,  $df = 55$ ,  $p < 0.001$ ). Finally, there tended to be a gradual overall improvement in the relationship between the child and the TS parent over time (Fig. 2).

#### ■ Factors associated with relationship between child and non-transitioned parent

Approximately 10% of the families had high or extreme levels of conflict between the child and the non-transitioning parent. There were several factors that predicted a positive relationship between the non-transitioned parent and the child at the time of the



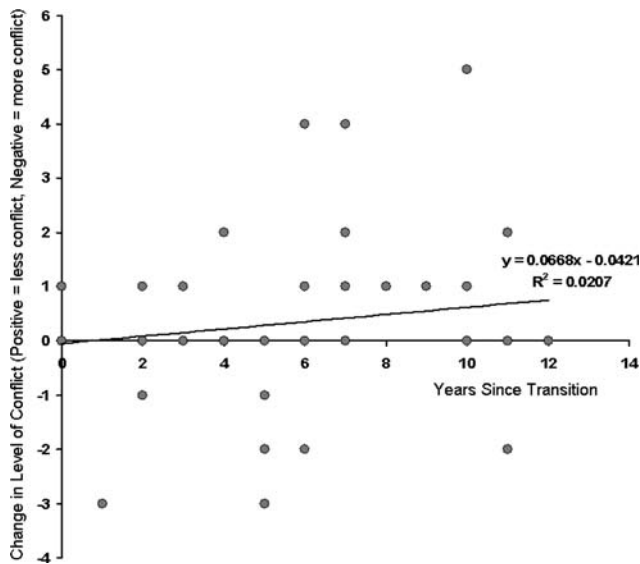
**Fig. 1** Age of the child at the time of transition vs. the level of conflict with the transitioned parent. Measurements include both relationship at the time of the transition and the time of the study (1 = no conflict, 5 = extreme level of conflict)

interview. These included less post-transition conflict between the parents ( $F = 11.55$ ,  $p = 0.001$ ) and less conflict currently between the transitioned parent and the child ( $F = 7.32$ ,  $p < 0.01$ ). Individuals who transitioned at a younger age had a better relationship with the non-transitioned spouse. Also, children who were younger at the time of the transition were reported to have a better post-transition relationship with the non-TS parent ( $t = 3.47$ ,  $df = 53$ ,  $p = 0.001$ ).

#### ■ Factors associated with sex of the child

There was a significant difference between the sex of the child and their age at the time of transition ( $t = 3.46$ ,  $df = 53$ ,  $p = 0.001$ ). The mean age of the girls at the time of transition was 15.4, compared to 9.6 for the boys. Boys were informed of the transition younger than girls ( $t = 3.56$ ,  $df = 52$ ,  $p < 0.001$ ), and boys also had younger TS parents than girls at the time of the transition ( $t = 3.46$ ,  $df = 53$ ,  $p = 0.001$ ).





**Fig. 2** Change in the level of conflict between the TS parent and the child (y-axis) vs. the time since the transition (x-axis). There is a general change toward less conflict over time

There were no sex differences in level of conflict, academic decline, embarrassment about the transition, or social stigma.

## Discussion

There were two primary factors that predicted a healthier, or less conflicted relationship between the child and the transitioning and non-transitioning parent. These factors included a younger age of the child at the time of the transition (Fig. 1) and a positive relationship between the two parents. As is true in children of divorce, children who experience considerable parental conflict tend to have greater difficulties in adjustment [12, 23]. In addition, a 10-year follow up of children of divorce showed that children who were younger at the time of the divorce fared better than older children [22]. Since the current study did not have a comparison group of children of divorce, it is not possible to tease apart the effects of the transition versus the effects of the divorce.

For the transitioning parent, the nature of the relationship at the time of the transition was highly predictive of a better longer term relationship. Comparing the relationship between the child and transitioned parent during the transition and at the time of the interview, there was a tendency toward an overall improvement in the relationship. However, what is most striking is the stability of the parent-child relationship over time (Fig. 2). Only three children went from the most extreme levels of conflict during the transition to minimal or no conflict at the time of

the study, whereas a swing in the opposite direction did not occur.

A higher level of conflict between the parents at the time of the transition did not predict longer term parent-child conflict. Thus an initial reaction with high conflict between parents does not necessarily negate a longer term positive relationship between the child and the transitioned parent. It is possible that the parents are able to protect their children from the parental conflict at the time of the transition. The time of the transition is often very stressful for the parents, and thus the key appears to be not that there is considerable conflict during this stressful period, but rather the evolution of the relationship over time. Those parents who are able to build healthier relationships between themselves, are also able to develop healthier relationships with their children.

One measure of childhood adjustment that is common to all children is academic performance. Children and adolescents who experience greater stress tend to have greater difficulties in academic performance [9, 20]. Whereas in divorce there is a relationship between decline in academic performance and level of family conflict [10], such a relationship was not found for this population. The majority of children did not have a decline in academic performance during the transition. Although time spent with each parent was not measured in this study, few children had no contact with the transitioned parent. It is possible that both parents spending time with their child offered some protection from a decline in academic performance of the children [3].

Rather than the extent of family conflict impairing academic performance, social stigma served as a factor more related to those children who demonstrated a decline in academic performance. The adverse consequences of stigma have been a source of recent research [16] and since stigma is most felt for children within the school setting, this may account for this relationship. One decision that families face is what name to use for the parent post-transition, and one-third of the children continue to use the pre-transition gender specific identifier (i.e., 'mom' for a female-to-male TS). Interestingly, those children who use the pre-transition parent identifier, or those who have no contact with their parent, are those who are most embarrassed by the transition. Children who are not embarrassed by the transition adopt either their parent's first name, a neutral nickname, or a post-transition gender congruent title (i.e., mom or dad). The small number of parents who were referred to as either aunt or uncle (2%) may reflect a desire to not alter the nature of the parental relationship.

Although there was a high rate of psychopathology in the children (35%), the rates did not greatly exceed rates found in the general population. Rates of depression in adolescence have been found to be as high as 33% in a community study [15]. The rates of ADHD vary by studies, but the current study is in agreement with a population-based incidence of 7% [1]. This study does have a higher rate of individuals with eating disorders compared with population-based studies [13]. Three of the four children with eating disorders were female, whereas one male had a disorder of increased intake and was obese. Since factors associated with gender role have been shown to be related to eating disorders [4, 18], the higher rate of eating disorders in this population may reflect the child's adaptation to the transition.

There are a number of limitations to this study. The major limitation of the study was that the children were evaluated through the report of the transitioned parent, rather than through an actual interview with the child or through a report of the non-transitioned parent. In general, parents are reasonable informants on adjustment or clinical symptoms in children, although parents are better at reporting externalizing disorders than internalizing disorders, especially in adolescents [5, 17, 19]. The study would be signifi-

cantly strengthened by obtaining collateral information to augment the parental reports. These include reports from teachers and other family members (i.e., grandparents, aunts, and uncles). Obtaining information from sources such as peers may be challenging, however, the information would be very helpful, especially in the adolescent age range. In addition, evaluations such as teacher reports, report cards, and school, medical, and/or therapists records would also be beneficial to complement the parents report. Finally, following children during the period that encompasses pre- and post-transition would assist in better delineating the longitudinal adaptation of children of a transitioning parent.

In summary, children whose parents transition between genders are placed in a unique situation. Those children who experience greater conflict during the transition tend to have greater conflict years later. As was demonstrated in our earlier study [25], children who are younger at the time of the transition tend to adapt better and maintain healthier relationships with both parents over time. Finally, although there may be considerable conflict between the parents at the time of the transition, this does not negatively impact the child, unless the conflict persists over time.

## References

1. Barbaresi WJ, Katusic SK, Colligan RC, Pankratz VS, Weaver AL, Weber KJ, Mrazek DA, Jacobsen SJ (2002) How common is attention-deficit/hyperactivity disorder? Incidence in a population-based birth cohort in Rochester, Minn. *Arch Pediatr Adolesc Med* 156:217–224
2. Barbin JM, Williamson DA, Stewart TM, Reas DL, Thaw JM, Guarda AS (2002) Psychological adjustment in the children of mothers with a history of eating disorders. *Eat Weight Disord* 7:32–38
3. Bisnaire LM, Firestone P, Rynard D (1990) Factors associated with academic achievement in children following parental separation. *Am J Orthopsychiatry* 60:67–76
4. Cantrell PJ, Ellis JB (1991) Gender role and risk patterns for eating disorders in men and women. *J Clin Psychol* 47:53–57
5. Chang PC, Yeh CH (2005) Agreement between child self-report and parent proxy-report to evaluate quality of life in children with cancer. *Psychooncology* 14:125–134
6. De Judicibus MA, McCabe MP (2004) The impact of parental multiple sclerosis on the adjustment of children and adolescents. *Adolescence* 39:551–569
7. Dong Q, Wang Y, Ollendick TH (2002) Consequences of divorce on the adjustment of children in China. *J Clin Child Adolesc Psychol* 31:101–110
8. Felner RD, Ginter MA, Boike MF, Cowen EL (1981) Parental death or divorce and the school adjustment of young children. *Am J Community Psychol* 9:181–191
9. Felsten G, Wilcox K (1992) Influences of stress and situation-specific mastery beliefs and satisfaction with social support on well-being and academic performance. *Psychol Rep* 70:291–303
10. Gottman JM (1998) Psychology and the study of marital processes. *Annu Rev Psychol* 49:169–197
11. Green R (1978) Sexual identity of 37 children raised by homosexual or transsexual parents. *Am J Psychiatry* 135:692–697
12. Hetherington EM (2005) Divorce and the adjustment of children. *Pediatr Rev* 26:163–169
13. Hoek HW, van Hoeken D (2003) Review of the prevalence and incidence of eating disorders. *Int J Eat Disord* 34:383–396
14. Hoke LA (2001) Psychosocial adjustment in children of mothers with breast cancer. *Psychooncology* 10:361–369
15. Lewinsohn PM, Hops H, Roberts RE, Seeley JR, Andrews JA (1993) Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students. *J Abnorm Psychol* 102:133–144
16. Major B, O'Brien LT (2005) The social psychology of stigma. *Annu Rev Psychol* 56:393–421
17. Moretti MM, Fine S, Haley G, Marriage K (1985) Childhood and adolescent depression: child-report versus parent-report information. *J Am Acad Child Psychiatry* 24:298–302
18. Murnen SK, Smolak L (1997) Femininity, masculinity, and disordered eating: a meta-analytic review. *Int J Eat Disord* 22:231–242

19. Nauta MH, Scholing A, Rapee RM, Abbott M, Spence SH, Waters A (2004) A parent-report measure of children's anxiety: psychometric properties and comparison with child-report in a clinic and normal sample. *Behav Res Ther* 42:813–839
20. Ng V, Koh D, Chia SE (2003) Examination stress, salivary cortisol, and academic performance. *Psychol Rep* 93:1133–1134
21. Sales J (1995) Children of a transsexual father: a successful intervention. *Eur Child Adolesc Psychiatry* 4:136–139
22. Wallerstein JS (1984) Children of divorce: preliminary report of a ten-year follow-up of young children. *Am J Orthopsychiatry* 54:444–458
23. Wallerstein JS (1991) The long-term effects of divorce on children: a review. *J Am Acad Child Adolesc Psychiatry* 30:349–360
24. Welch AS, Wadsworth ME, Compas BE (1996) Adjustment of children and adolescents to parental cancer. Parents' and children's perspectives. *Cancer* 77:1409–1418
25. White T, Ettner R (2004) Children of parents who make a gender transition: disclosure, risks, and protective factors. *J Gay Lesbian Psychother* 8:129–145